

## APPARATUS FOR CLEANING AN ANIMAL'S PAW

### BACKGROUND OF THE INVENTION

#### 5 1. FIELD OF THE INVENTION

The present invention relates to cleaning devices for animal paws. More particularly, the present invention relates to an apparatus for individually cleaning an animal's paw that can be easily moved, stored, maintained and operated.

10

#### 2. DESCRIPTION OF THE PRIOR ART

Animals' paws often become dirty through contacting various outdoor substances such as mud or dirt. Then, upon reentering a home, the animals track the mud or dirt throughout the home. Therefore, it is often necessary to clean 15 animals and their paws before allowing them to reenter the home.

Devices such as the one disclosed in U.S. Patent No. 6,439,160, have been developed to aid in cleaning animal paws. The devices generally consist of large enclosures which allow animals to be cleaned while containing runoff, waste, and cleaning solutions within the enclosures. These enclosures are 20 typically large basins in which animals place all four paws, or containers that enclose entire animals except for their heads. Thus, enclosures found in the prior art are generally the same size or larger than the animal to be cleaned and are thus cumbersome to use, move, and store.

Prior art devices also require a variety of mechanical and electrical 25 components to scrub, wash, and clean animals. These mechanical and electrical components further increase the size and weight of the devices. Thus, animals must generally be transported to the devices thereby creating a risk that dirt, debris, and waste will be further spread. Additionally, because these devices cannot be easily moved, especially when filled with water, a drain must be nearby 30 to dispose of waste and runoff that results from cleaning animals.

Further, the use of mechanical means for scrubbing, washing, and cleaning animals' paws exposes animals to a degree of unwarranted risk as animals may be exposed to excessive pressures or forces without the users' knowledge or control. Large enclosures, mechanical means for scrubbing, and 5 limited control by users may additionally frighten animals making it difficult to contain or control the animals. Additionally, the complex nature of prior art devices, and their many moving parts, demand that users keep the devices in good working order.

Accordingly, there is a need for an improved apparatus for cleaning 10 animal paws that overcomes the limitations of the prior art. More particularly, there is a need for an apparatus which can clean a single paw, is inexpensive and easy to use, is portable and easily stored, and provides for easy disposal of waste water.

## 15 SUMMARY OF THE INVENTION

The present invention solves the above-described problems and provides a distinct advance in the art of cleaning devices for animal paws. More particularly, the present invention provides an apparatus for individually cleaning each of an animal's paws that can be easily moved, stored, maintained and 20 operated.

The apparatus broadly includes a elongated rigid cylindrical sidewall, an end wall, and an open rim. The end wall closes one end of the sidewall such as to allow the apparatus to contain a liquid. The rim is positioned on the end of the sidewall opposite to the end wall and is sized and configured to receive the 25 paw and substantially seal to the paw. The rim is sized and configured by selecting the internal diameter of the rim based on the size of the paw such that the paw may freely move through the rim and into the apparatus, while still fitting snugly through the rim. The snug fit of the paw within the rim allows the rim to substantially seal to the paw which creates a suction effect as the paw is 30 withdrawn from the apparatus. The suction effect pulls water, dirt and other debris away from the paw.

A cleaning element may be located inside the apparatus to assist in cleaning the paw. The cleaning element may be a sponge, a brush, a plurality of projections extending inwardly, or any other similar element. The cleaning element is positioned inside the apparatus such that it cleans the paw through contact when the paw is inserted into the apparatus. Thus, the paw may be cleaned by the combination of the suction effect and the cleaning element.

The apparatus may additionally include identifying markings and a gripping element on its exterior surface. The identifying markings allow the apparatus to be quickly identified and the gripping element assists with gripping and holding onto the apparatus while in use.

In operation, the apparatus is first partially filled with a liquid. The liquid may be a cleaning solution, water, water with detergent, shampoo, or any other solution suitable for cleaning animal paws. An animal paw is then inserted through the rim and into the liquid. Once the paw is inserted in the apparatus, the user agitates the apparatus or the paw such that the paw is cleaned by contacting the cleaning element. As the user withdraws the paw from the apparatus, the rim substantially seals to the paw, thereby creating the suction effect which draws dirt and debris away from the paw. Once the user removes the paw from the apparatus, he or she disposes of any remaining waste by dumping the contents of the apparatus into a drain or other receptacle. The apparatus may then be stored without any further attention until its next use.

By constructing the apparatus as described herein, numerous advantages are realized. For example, an animal's paw may be selectively cleaned without expending considerable time and effort that would be needed to clean the entire animal. Additionally, because the apparatus is small and lightweight, it may be easily moved to the animal's location thereby eliminating the need to transport the animal. Furthermore, the runoff and waste that results from cleaning the paw is contained within the apparatus allowing easy cleanup and disposal of the waste. A further advantage is that the paw may be quickly cleaned with a single device, and without exposing the animal to any danger caused by excessive scrubbing, washing, or force applied by an automated device. These

and other important aspects of the present invention are described more fully in the detailed description below.

#### BRIEF DESCRIPTION OF THE DRAWING FIGURES

5 A preferred embodiment of the present invention is described in detail below with reference to the attached drawing figures, wherein:

Fig. 1 is a perspective view of an apparatus for cleaning an animal's paw constructed in accordance with a preferred embodiment of the present invention having a transparent sidewall;

10 Fig. 2 is a fragmentary view of an alternative embodiment of the apparatus having an opaque sidewall;

Fig. 3 is a perspective view of another embodiment of the apparatus showing an exterior surface of the apparatus;

15 Fig. 4 is a perspective view of another embodiment of the apparatus having a cleaning element comprising a sponge; and

Fig. 5 is a perspective view of another embodiment of the apparatus wherein the cleaning element comprises the sponge, a brush, and a plurality of projections.

20 The drawing figures do not limit the present invention to the specific embodiments disclosed and described herein. The drawings are not necessarily to scale, emphasis instead being placed upon clearly illustrating the principles of the invention.

#### 25 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Turning now to the drawing figures, and particularly Fig. 1, an apparatus 10 for cleaning an animal's paw constructed in accordance with a preferred embodiment of the invention is illustrated and broadly comprises an elongated rigid cylindrical sidewall 12, an end wall 14, and an open rim 16. The 30 end wall 14 closes one end of the sidewall 12 such as to allow the apparatus 10 to contain a liquid 18. The rim 16 is positioned on an end of the sidewall 12

opposite to the end wall 14. A cleaning element 20 may be located within the apparatus 12 to assist in the cleaning of the paw.

The rim 16 is preferably fluted such that the paw is safely guided into the apparatus 10 by the shape of the rim 16 without catching or snagging. The 5 rim 16 is sized and configured by having an internal diameter selected based on the size of the paw such that the paw may freely move through the rim 16 and into the apparatus 10, while still fitting snugly through the rim 16. The size and configuration of the rim 16 allows the rim 16 to receive the paw and substantially seal to the paw due to the snug fit of the paw through the rim 16. Thus, a suction 10 effect is created as the paw is withdrawn from the apparatus 10 due to the rim 16 substantially sealing to the paw. The suction effect pulls water, dirt, and other debris away from the paw.

The internal diameter of the rim and the internal diameter of the sidewall are preferably equal, thereby forming a uniform cylindrical structure. The 15 internal diameter of the sidewall is selected based on the size of the paw such that the paw may freely move into the apparatus 10, while still fitting snugly within the apparatus 10. The sidewall 12 preferably has an internal diameter between one and three inches, a length between four and eight inches, an external diameter between one and one-sixteenth of an inch and four inches, and a thickness 20 between one-sixteenth of an inch and one-half of an inch. The dimensions of the sidewall 12 and rim 16 may vary according to the size the paw to allow the rim to be the same size or only slightly larger than the paw, to ensure the snug fit of the paw through the rim 16. Thus, the dimensions of the sidewall 12 and rim 16 would be greater for a large animal than for a small animal. Additionally, the dimensions 25 of the sidewall 12 and rim 16 may be selected based on the size of an animal's leg such as to allow the leg to be inserted through the rim 16 and into the apparatus 10. Therefore, the leg, or portions of the leg in addition to the paw, may be cleaned by the apparatus 10 in the same manner as the paw.

The end wall 14 has an interior portion 22 to which the cleaning 30 element 20 may be connected. The interior portion 22 may contain a connecting element for the cleaning element 20. The end wall 14 also includes an exterior portion 24 which is substantially flat so that the apparatus 10 may stand upright

as depicted for easy storage. The end wall 14 also may be detachable from the sidewall 12 to allow the apparatus 10 to be easily cleaned.

The sidewall 12 and end wall 14 may be constructed of any material that is rigid and capable of retaining a liquid, including a wide variety of plastics, metals, glass, or other common and inexpensive materials. Ideally, the material is durable, lightweight, and easily cleaned. In one embodiment illustrated in FIG. 1, the sidewall 12 is constructed out of a transparent material thereby allowing the paw to be viewed through the sidewall 12. In another embodiment, the sidewall 12 may be constructed out of an opaque material, such as shown in FIG. 2. The rim 16 may be constructed of the same material as the sidewall 12, or it may be constructed of a flexible or pliable material to assist in creating the seal and guiding the paw into the apparatus 10.

The sidewall 12 has an interior surface 26 that assists in the cleaning of the paw by rubbing water, dirt and debris off the paw through contact. The interior surface 26 may have ridges, ribs, or other formations designed to further aid in rubbing the paw. The interior surface 26 may be made of rubber, plastic, or any other material suitable for cleaning the paw. The interior surface 26 may contain a decorative color or pattern to assist in its use and it 26 may also be removable to allow for cleaning or replacement. Additionally, the interior surface 26 may be constructed from the same material as the sidewall 12.

The interior surface 26 may also substantially seal to the paw due to the size and configuration of the sidewall 12. Thus, the suction effect may be created as the paw is withdrawn from the apparatus 10 due to the snug fit of the paw within the apparatus 10. The suction effect may then be created by the both the interior surface 26 and the rim 16. Therefore, the paw may be cleaned by contact with the interior surface 26 and the suction effect by inserting the paw through the rim 16 into the apparatus 10, agitating the paw along the interior surface 26, and withdrawing the paw from the apparatus 10.

In another embodiment illustrated in FIG. 3, identifying markings 28 and a gripping element 30 are positioned on an exterior surface 32 of the sidewall. The markings 28 may be a graphic design, a logo, a collection of shapes, or words or phrases which allow the apparatus 10 to be readily and quickly identified. The

gripping element 30 assists with gripping and holding onto the apparatus 10, thereby eliminating any problem caused by liquids and other slick solutions on the exterior surface 32. The gripping element 30 may be a series of bumps aligned on a non-slip plastic coating which forms an annular ring around the exterior 5 surface 32. The gripping element 30 may be removable from the exterior surface 32, or it may be permanently attached.

The cleaning element 20 may be located anywhere within the apparatus 10 and may be a single element or combination of elements and surfaces. The cleaning element 20, or portions thereof, may be removably or 10 permanently attached to the apparatus 10 or the interior surface 26.

In the embodiment of FIG. 4, the cleaning element 20 comprises a sponge 34 located adjacent the interior portion 22 of the end wall 14. The sponge 34 scours the paw thereby removing dirt and debris from the paw. The sponge 34 has a diameter substantially equal to the internal diameter of the sidewall 12 15 and a thickness of approximately one inch to provide a proper cleaning surface 36; however, the diameter and thickness of the sponge 34 may be any size sufficient to aid in the cleaning of the paw. The cleaning surface 36 of the sponge 34 may contain a scouring pad to further aid in cleaning the paw. The sponge 34 may be organic or synthetic and have a texture selected based on the size of the 20 paw. The color of the sponge 34 may match that of the apparatus 10. Furthermore, the sponge 34 may be located anywhere within the apparatus 10 and may be removably attached to the apparatus 10 or interior surface 26 through the connecting element, hooks, latches, or other means so that it may be removed, cleaned, and reinserted in the apparatus 10. Alternatively, the sponge 25 34 may be permanently attached to the apparatus 10 or interior surface 26.

In the embodiment of FIG. 5, the cleaning element 20 is a combination of the sponge 34, a brush 38, and a plurality of projections 40. The sponge 34, the brush 38 and/or the projections 40 may be removable from the apparatus 10 so that they may be easily cleaned. The brush 38 may consist of a 30 plurality of bristles 42 fastened into a base which is attached to the interior surface 26. The bristles 42 may be of any shape, consistency and length suitable for scrubbing the paw. The plurality of projections 40 may be any combination of

bumps 44, nubs, fingers, or other such protrusion for contacting the paw. The projections 40 may extend in any direction from the interior surface 26 provided that they contact the paw when the paw is inserted into the apparatus 10. The projections 40 may be constructed of plastic or any other suitable material. The 5 brush 38 and the projections 40 function by scrubbing against the paw thereby removing dirt and other debris. Thus, the paw may be cleaned by scouring with the sponge 34, scrubbing with the brush 38 and the projections 40, and the suction effect created by the rim 16 substantially sealing to the paw.

In operation, the apparatus 10 is partially filled with the liquid 18. The 10 liquid 18 may be a cleaning solution, water, water with detergent, shampoo, or any other liquid suitable for washing the paw. The user then inserts the animal's paw through the rim 16 and into the liquid 18. Once the animal's paw is inserted in the apparatus 10, the user agitates the apparatus 10 or the paw such that the paw contacts and is cleaned by the cleaning element 20. For example, if the cleaning 15 element 20 is a sponge 34 attached to the interior portion 22 of the end wall 14, the user would agitate the paw so that the surface 36 of the sponge 34 would scour the paw, thus removing dirt and debris from the paw. Alternatively, even if the apparatus 10 does not contain a cleaning element 20, a user may agitate the apparatus 10 or the paw such that the paw contacts and is cleaned by the interior 20 surface 26. If the sidewall 12 is comprised of the transparent material, the user may view the paw's position in the apparatus 10 and monitor the cleaning process to ensure that the paw is sufficiently cleaned by contacting the cleaning element 20 or the interior surface 26.

After the paw is sufficiently agitated, the user withdraws the paw from 25 the apparatus 10. As the paw is withdrawn from the apparatus 10, the suction effect is created by the rim 16. The suction effect draws water, dirt, debris, and other waste away from the paw which remain in the apparatus 10 until the user dumps the contents of the apparatus 10 into a drain or other receptacle. The apparatus 10 may then be stored without any further attention until its next use.

30 Although the invention has been described with reference to the preferred embodiment illustrated in the attached drawing figures, it is noted that

equivalents may be employed and substitutions may be made herein without departing from the scope of the invention as recited in the claims.

Having thus described the preferred embodiment of the invention, what is claimed as new and desired to be protected by Letters Patent includes the

5 following: